FHWA REGION NO	STATE	FED. AID PROJ. NO	SHEET NO.	TO SH
3	MD.	SEE TITLE SHEET		

Intersection Operation

The existing cabinet, and controller are to be utilized. The phasing is to be modified to provide a right turn overlap for the westbound to northbound movement.

Construction Details

A. Existing cabinet/controller are to be utilized.

B. Install 12 in. x 30 ft. steel strain pole with 20 ft. luminaire arm, and 250 watt HPS luminaire (Note: two 3 in., 90–degree (Schedule 40) PVC bends). [Use four 1–3/4 in. x 90 in. anchor bolts.]

C. Install 12 in. x 30 ft. steel strain pole with 20 ft. luminaire arm, and 250 watt HPS luminaire (Note: one 2 in., 90–degree (Schedule 40) PVC bend). [Use four 1–3/4 in. x 90 in. anchor bolts.]

D. Install handhole.

E. Install 1 in. liquid tight, non–metallic conduit for loop detector sleeve.

F. Install 2 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.

G. Install 3 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.

H. Conduit for interconnect cable. Refer to interconnect plans.

J. Install 4 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.

K. Install 4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.

L. Install 6 ft. x 30 ft. quadrupole type vehicle loop detector (2–4–2 turns).

M. Install 3/8 in. steel span wire and vehicle signal head as shown.

N. Install 3/8 in. steel span wire, 1/4 in. tether wire, vehicle signal heads, and relocate existing sign as shown (Note: Provide approximately 25 ft. of additional electrical cable for each signal head for use during roadway construction phasing).

O. Install 3/8 in. steel span wire, 1/4 in. tether wire, and vehicle signal heads as shown (Note: Provide approximately 25 ft. of additional electrical cable for each signal head for use during roadway construction phasing).

P. Install 24 in. preformed white pavement marking for stop line.

Q. Extend existing stop line with 24 in. preformed white pavement marking.

R. Use existing handhole and splice new loopwire to existing 2–conductor aluminum shielded cable.

S. Remove existing wood pole and all attached equipment.

T. Remove existing span wire and all attached equipment.

U. Cap and abandon existing conduit.

V. Use existing conduit.

W. Use existing span wire.

X. Use existing strain pole.

Y. Install 1 in. galvanized steel conduit for loop detector sleeve.

Equipment List "A"

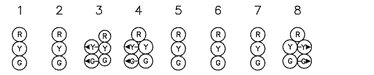
Equipment to be supplied by the SHA.

Quantity	Unit	Description
1	EA	8 in./12 in., one–way, five section (8 in. R,Y,G / 12 in. YA,GA) adjustable traffic signal head – span wire mount.
3	EA	12 in., one–way, three section (R,Y,G) adjustable traffic signal head – span wire mount.
2	EA	12 in., one–way, five section (R,Y,YA,G,GA) adjustable traffic signal head – span wire mount.

Equipment List "B"

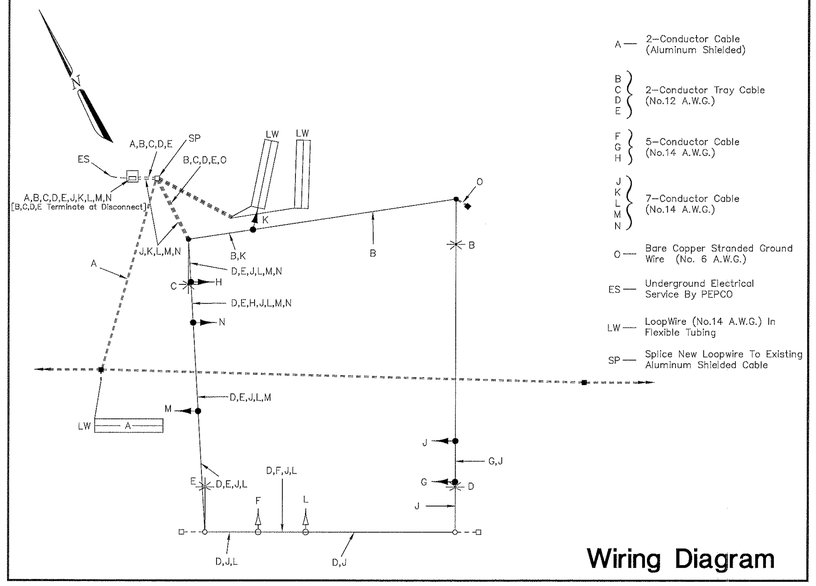
Equipment to be furnished and/or installed by the Contractor.

Quantity	Unit	Description
2	CY	Test pit excavation.
75	LF	24 in. preformed white pavement marking for stop line.
2	EA	30 ft. steel strain pole.
3	EA	Handhole.
350	LF	Sawcut for signal loop detector.
1050	LF	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
115	LF	2–conductor (aluminum shielded) electrical cable (No. 14 A.W.G.).
900	LF	2–conductor electrical tray cable (No. 12 A.W.G.).
125	LF	5–conductor electrical cable (No. 14 A.W.G.).
1100	LF	7–conductor electrical cable (No. 14 A.W.G.).
75	LF	Bare copper ground wire (No. 6 A.W.G.).
300	LF	1/4 in. tether wire.
450	LF	3/8 in. steel span wire.
70	LF	1 in. galvanized steel conduit for loop detector sleeve.
5	LF	1 in. liquid tight, flexible, non–metallic conduit for loop detector sleeve.
10	LF	2 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.
60	LF	3 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.
100	LF	4 in. polyvinyl chloride (Schedule 40) electrical conduit – trenched.
130	LF	4 in. polyvinyl chloride (Schedule 80) electrical conduit – slotted.
6	CY	Concrete foundation for signal equipment.
3	EA	Ground rod – 3/4 in. diameter x 10 ft. length.
2	EA	20 ft. Luminaire arm with 250 watt HPS luminaire.
6	EA	Install traffic signal head – span wire mount.
10.5	SF	Relocate existing sheet aluminum signing – overhead mount.
LS	LS	Removal of existing traffic signal equipment.
2	EA	Loop detector splice.



Phase 2 & 5	R	R	G ← G —	G ← G —	G	R	R	R — G →	⌐→
5 Change	R	R	G ← Y —	G ← Y —	G	R	R	R — Y →	→
Phase 2 & 6	G	G	G	G	G	R	R	R	←→
2 & 6 Change	Y	Y	Y	Y	Y	R	R	R	→
Phase 4	R	R	R	R	R	G	G	G	↓
4 Change	R	R	R	R	R	Y	Y	Y	↓
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	↑↓

Phase Chart



Wiring Diagram

Maintenance of Traffic
Phase 2, Stage 3

Sheet 25 of

A/E GROUP, INC.
CONSULTING ENGINEERS • PLANNERS
11409 CRONHILL DRIVE
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A/E JOB NO: 94–264

REVISIONS	APPROVALS
	CHIEF, SIGNAL DESIGN SECTION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MDOT – STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION SIGNAL # 15035515.55

DRAWN BY: J. Dirndorfer
DES. BY: J. Dirndorfer
CHK. BY: 11/7/95
DATE: November 6, 1995
SCALE: N/A

MD 355 at Travis Avenue

COUNTY: MONTGOMERY

F.A.P. NO. AC–NH–G–5113(10) C
S.H.A. NO. M 611–501–371

TS/STD. NO. 3555-X3-GI

SHEET NO. ____ OF ____